

# A SMOOTH LANDING



DEVELOPER : City of Karratha  
MAIN CONSTRUCTION COMPANY : Woollam Constructions  
ARCHITECT : Saunders Turner Ellick Architects Pty Ltd  
CONSTRUCTION VALUE : \$34.5 million

The complete upgrade and refurbishment of the existing regional Karratha Airport includes a new International lounge in preparation for international flights, as well as a new baggage system and atrium arrival and departure lounges.

**The \$34.5 million Karratha Airport Terminal Building Redevelopment Upgrade improves the functionality of one of regional Australia's busiest airports.** Serving approximately 850,000 passengers per year through over 70 domestic flights per week, the upgrade prepares for the possibility of accommodating international flights. With a strong history of airport design and construction, Woollam Constructions delivered the new terminal building without disruption to the airport's daily operations.

The heavily staged upgrade of the Karratha Airport Terminal commenced in June 2014 and saw the construction of approximately 4100m<sup>2</sup> of new building over two floors. Designed to increase the size and amenity of the terminal, the upgrade included the development of an atrium, courtyard, associated mechanical plant areas as well as improved baggage claims. A new arrivals and departures area features increased food, beverage and retail options while new spaces are provided for airlines to operate frequent flyer lounges. The overall ambiance of the terminal has been updated through internal finishes

and external works that include new bathrooms, a new façade and the tiling and painting of existing areas.

"The main challenge was maintaining the function of the airport and ensuring there was no disruption to its facility," explains Mick Cadzow, Woollam Constructions' Project Manager of the Karratha Airport Terminal Building Upgrade. "It was a co-ordinated, staged programme with constraints in place to ensure everything went to plan."

The strategy of constructing of new facilities to accommodate each airport activity before the decommissioning of its old facility safeguarded the continuance of normal trading and functional operations. As a result, demolition and construction was ongoing throughout the project without downtime. "The site ran 24 hours a day," says Mick. "There was a day shift and a night shift."

Known as the gateway to Western Australia's Pilbara region, Karratha is located 1557km north of Perth. At the centre of the resources

boom, Karratha Airport supports the high volume of fly-in fly-out workers to this remote area. The outlying nature of the airport, in addition to the potential for cyclone events, added another layer of complexity to its upgrade. "The remoteness of Karratha meant we had to factor the logistics of getting suppliers to the site into our planning as well," Mick explains.

Despite these potentially taxing conditions, Woollam Constructions completed the project ahead of the contract completion date. This remarkable achievement is, as Mick describes, "the direct result of planning." He further attributes the project's success to the high level of collaboration amongst those involved in the upgrade.

"It was an exceptional team effort," Mick says. "Not only the builders but the subcontractors, the client, the client's project manager, the architect, the consultants – it was a real collaborative effort on behalf of everyone."

The Karratha Airport Terminal Building Redevelopment Upgrade adds to the 13 regional airports Woollam Constructions have delivered since 2005. Experienced in overcoming the challenges of working in remote locations and negotiating the complexities of the heavily regulated aviation

industry, Woollam Constructions prides itself on causing zero impact to flight schedules, maintaining the continuity of airport operations and developing strong working relationships with stakeholders.

As a leader in the commercial construction industry, Woollam Constructions specialise in the design and construction of aged care and health facilities as well as public and private infrastructure projects. Headquartered in Brisbane, the multi-award winning Commercial Builder of the Year operates offices across New South Wales and Queensland with a strong presence in Western Australia. Originating in 1884, Woollam Constructions is one of Australia's oldest privately owned construction companies.

Current projects for Woollam Constructions include the Good Shepherd Home, a 3-storey residential aged care facility in Townsville, the design/construction of Townsville Private Hospital and the design/construction of new Onslow Shire Council Chambers in Western Australia.

**For more information contact Woollam Constructions**, 71 Lytton Road, East Brisbane QLD 4169, phone 07 3456 1600, fax 07 3456 1650, website [www.woollamconstructions.com.au](http://www.woollamconstructions.com.au)

Below KSD-Demolition completed all the demolition work for the Karratha Airport Redevelopment.

Below The City of Karratha initiated the redevelopment to modernise and expand the airport.



For the family team at KSD-Demolition, work on the Karratha Airport Redevelopment has produced some big changes. A new company name and Karratha location are two of the project's exciting outcomes, as KSD-Demolition, in the words of office administrator Jamie Hunter, keeps "getting bigger and better."

"We used the project as a springing board for the company," Jamie explains. "We were not fly in, fly out. We moved the whole family from Kalgoorlie and were hoping to branch out. We will have been here 18 months by the time the job finishes and are now part of the community."

Formerly Kalgoorlie Salvage and Demolition, the re-branded KSD-Demolition remains the same specialist business servicing all of WA and backed by over 30 years experience in demolition and asbestos removal. Now operating from Karratha in addition to their established Kalgoorlie Head Office, KSD-Demolition got off to a flying start in their new location, completing all the required demolition work for the Karratha Airport Redevelopment.

"It was five months of nightshift at the still operational airport," says Jamie, describing the project's enormity. "We had to work nights straight through to get the demo completed."

Specialising in large projects for over 15 years, KSD-Demolition had no difficulties meeting these challenges. A fitting welcome to their new city, the Karratha Airport Redevelopment has been a success for the company. "The Council has been great, the contractors have been great," Jamie reports. "Everything has gone smoothly. The new airport is going to be a great thing for the community up here."

WorkSafe-accredited demolition and asbestos removal experts, KSD-Demolition's services include commercial, residential and large-scale industrial demolition, all aspects of asbestos removal and block clearing. Dedicated to providing high quality service, KSD-Demolition, as Jamie says, "accomplish the best outcomes for our clients."

KSD-Demolition is currently completing demolition works at RAAF Exmouth, the Department of Housing Onslow, the Dampier Community Hub and Library as well as the Large Fuel Station (Hannan Street, Kalgoorlie).

For more information contact KSD-Demolition, 1 East Street, Kalgoorlie 6340 WA, PO Box 515, Kalgoorlie 6340 WA, phone 08 9021 5899, fax 08 9091 2787, email [jamie@kaldemo.com.au](mailto:jamie@kaldemo.com.au), website [www.ksd-demolition.com.au](http://www.ksd-demolition.com.au)

As client, project manager, funding body and key stakeholder of the project, the City of Karratha was involved from concept stage through to design, tender and construction of the \$35 million Karratha Airport Redevelopment. The City of Karratha initiated the redevelopment to modernise and expand Western Australia's second busiest airport to cater for its growing community. The project included incorporating new arrival and departure areas, increased food, beverage and retail options, as well as increasing floor space and the overall ambiance of the facility.

"The first objective was to draw in all the terminal elements together as one modern building," says City of Karratha Mayor Peter Long. A lack of previous documentation detailing the airport's evolution, hid potential complications to the unification of new and old parts of the development. The design for a new building spreading over two floors, was developed by STEA Architects, who produced a holistic design which flowed well into the existing airport buildings and unified the whole structure.

Managing the Karratha Airport project was not without its challenges, as the airport is located in the heart of the Pilbara and a highly cyclone prone area. The project team of 15 had to plan for unanticipated extreme weather events in their construction schedule. The area also has a history of heavy rain fall which could have disrupted the installation of key concrete steel

posts which form the main supports for the new structures, and therefore delayed the project. "This year we were fortunate as there was no heavy rain and wind but we had to plan that it would happen." Mayor Long explains.

Additional planning was also required to limit disruption to the airport's daily operations. The City of Karratha's Airport General Manager Mitchell Cameron and his team liaised constantly with the project team and all others on the build to safeguard against disruption to the airport's working environment and maintain normal trading and functional operations. Woollam Constructions provided extensive logistical planning for the construction of the multi-staged approach, with contractors working around the clock. This tightly constrained schedule resulted in a well-managed and efficient worksite, and a final completion occurring ahead of schedule.

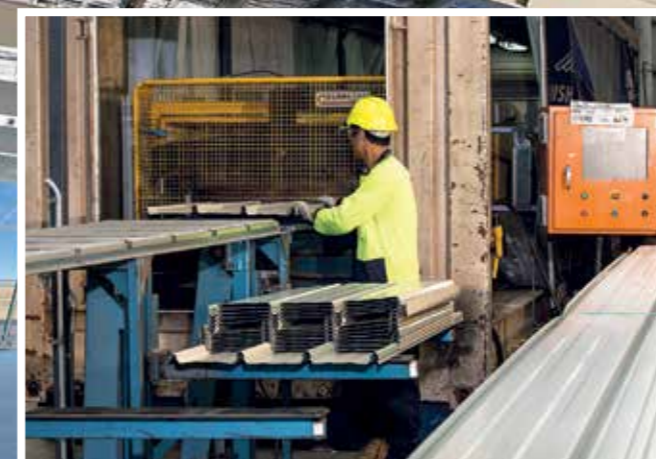
The City of Karratha is currently undertaking a number of other community initiatives including the \$18 million Wickham and Dampier Community Hubs, \$11 million Effluent Reuse Scheme upgrade and is in the planning for a new Karratha Arts and Community Precinct.

For more information contact City of Karratha, PO Box 219, Karratha WA 6714, phone 08 9186 8555, fax 08 9185 1626, email [enquiries@karratha.wa.gov.au](mailto:enquiries@karratha.wa.gov.au), website [www.karratha.wa.gov.au](http://www.karratha.wa.gov.au)

Below Fielders manufactured the roof sheeting and wall cladding suitable for cyclonic conditions at the Karratha Airport.



Karratha Airport Redevelopment, WA



Roofing, cladding and flooring specialists Fielders delivered roof sheeting and wall cladding to the Karratha Airport Redevelopment specially designed to withstand the extremes of the cyclone-prone region. To ensure maximum protection, Fielders supplied the HiKlip®630 from its range of watertight, concealed fixed-roofing products.

"Fielders supply a range of profiles to suit these climatic conditions," explains Fielders Business Development Manager Geoff McInnes. "These are the HiKlip®630, the KingKlip®700 and the WideKlip®760. When clip fixed, the HiKlip® system has no fixings through the sheet so it provides a watertight solution for the end client."

The HiKlip® system is an economical alternative to screw-fixed roofing as it's designed to provide optimum holding strength without penetrating the sheet. The concealed clip system accommodates thermal expansion and eradicates the need for expansion joints. With large span capabilities, Hi-Klip®630 suits major commercial, industrial and domestic projects and is covered by Fielders' unique Watertight Installation Guarantee, when installed by a Fielders Approved Contractor. Fielders can guarantee the watertightness of the product using one of their concealed fixed systems (KingKlip®, HiKlip® and WideKlip®) for up to 20 years.

Hi-Klip®, like all of Fielders' concealed fixed-roofing profiles, can be produced using the Fielders Mobile Mill service. The Karratha Airport Redevelopment was, as Geoff explains, "an onsite Mobile Mill job."

Using their Mobile Mill, Fielders roll-form steel roofing and decking to meet a project's specific requirements. "As part of the Mobile Mill service we run a continuous sheet onsite up to 100m," Geoff says. "The client can get a continuous sheet and the best water-tight product as a result." Fielders' Mobile Mill option can be a cost effective solution compared to transporting long length ready-made sheets.

Fielders are currently supplying the Meriton Serviced Apartments development, North Sydney, with 20,000m<sup>2</sup> of KingFlor® CF210 SlimFlor decking. A "game-changer" as the first Australian high-rise residential building constructed wholly from structural steel, Fielders' KingFlor® flooring system contributes a reduction in construction time and costs.

For more information contact Fielders - Wangara (Sales Centre and Factory), 35 Prestige Parade, Wangara WA 6065, phone 08 9303 1400, fax 08 9303 1496, email perthorders@fielders.com.au, website www.fielders.com.au